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NO. 8514 P. 6

SEP 06 2006

Application No. 10/792,307

Reply to Office Action

REMARKS/ARGUMENTS

Examiner Interview

Applicants thank Examiner Wax for the courtesy extended to their representative, Melissa E. Kolom, during the telephonic interview held on July 12, 2006. The matters discussed during the interview are substantially as set forth herein.

The Pending Claims

Claims 1, 3, 5-12, 20-23, and 32-45 currently are pending. Claims 9, 10, 20-23, and 32-45 are withdrawn from consideration as being drawn to a non-elected invention.

The Amendments to the Title

The title has been amended to more accurately reflect the subject matter of the pending claims. Specifically, the title has been amended to delete the term "transductin-1." Thus, no new matter has been added by way of this amendment.

Correction of Inventorship

Applicants submit herewith an Amendment And Petition To Correct Inventorship Under 37 C.F.R. § 1.48(b), removing Edward Wilcox as a co-inventor of the subject application.

The Office Action

The Office Action rejects claims 1, 3, 5, and 6 under 35 U.S.C. § 102(b) as allegedly anticipated by Kurima et al., *Nature Genetics*, 30: 277-284 (2002) ("the Kurima reference"). The Office Action also rejects claims 7, 8, 11, 12, 32, and 33 under 35 U.S.C. § 103(a) as allegedly obvious in view of the Kurima reference. In addition, the Office Action provisionally rejects claims 1, 3, 5-8, 11, 12, 31, and 32 under 35 U.S.C. § 101 as allegedly claiming the same subject matter recited in claims 7-9, 11, 12, 15, 16, 23, and 24 of copending Application No. 10/487,887.

Reconsideration of the rejections is respectfully requested for the reasons discussed below.

Application No. 10/792,307

Reply to Office Action

Discussion of the Claim Rejections in View of the Kurima Reference

The Kurima reference discloses a cDNA sequence encoding TMC2. This sequence was listed in the GenBank database in March 2002 under GenBank accession number AF417580, and was assigned version number AF417580.1 and sequence identifier GI:19223982. The sequence also was assigned RefSeq accession number NM_080751, and given version number NM_080751.1 and sequence identifier GI:20304092. This sequence is hereinafter referred to as "the Kurima 2002 sequence."

The above entries were subsequently updated due to submission of a new sequence on March 3, 2003. The new sequence can be located by way of the same GenBank and RefSeq accession numbers, but was given a new version number and sequence identifier for each entry. In GenBank, the new sequence was assigned version number AF417580.2 and sequence identifier GI:28642834. In RefSeq, the new sequence was assigned version number NM_080751.2 and sequence identifier GI:94536851. The updated sequence is referred to herein as "the 2003 Genbank sequence."

Applicants previously provided an alignment of the Kurima 2002 sequence with SEQ ID NO: 3 of the present application, showing that the Kurima 2002 sequence contains only nucleotides 48-3121 of SEQ ID NO: 3; it does not contain residues 1-47 of SEQ ID NO: 3. Thus, the Kurima 2002 sequence does not disclose or suggest an isolated or purified nucleic acid molecule comprising SEQ ID NO: 3 or SEQ ID NO: 4, or a sequence complementary thereto. Moreover, the Kurima reference does not otherwise disclose or suggest the missing residues of the Kurima sequence.

The 2003 GenBank sequence is identical to SEQ ID NO: 3; however, the 2003 GenBank sequence is not prior art to the present application. As indicated in the GenBank record itself, the new sequence was submitted to GenBank on March 3, 2003 and published on March 5, 2003 (i.e., not more than one-year prior to the filing date of the present application). Thus, the 2003 GenBank sequence is not prior art under 35 U.S.C. § 102(b). Furthermore, the 2003 GenBank sequence was submitted by the same inventors named in the subject application, as amended herein. Thus, the 2003 GenBank sequence is not a publication "by another," and is not prior art to the subject application under 35 U.S.C. § 102(a).

Application No. 10/792,307

Reply to Office Action

For the foregoing reasons, the prior art rejections of the pending claims should be withdrawn.

Discussion of Double Patenting Rejection

Claims 1, 3, 5-8, 11, 12, 31, and 32 are provisionally rejected under section 101 as allegedly claiming the same subject matter as that recited in claims 7-9, 11, 12, 15, 16, 23, and 24 of copending Application No. 10/487,887. As the double-patenting rejection is provisional, the rejection should be withdrawn upon a finding that the current claims are in condition for allowance, in which case the rejection may be applied to the claims of the copending application.

Conclusion

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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